ZALUDOVA, A.; SEDLACEK, J.

Mathematical statistics in technical control. p. 48. (Strojirenstvi, Vol. 6, No. 1, Jan 1956, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

ZALUDOVA, A.

"The Conference of Mathematical Statisticians in Nottingham"

p. 231 (Institute of Mathematics, Czechoslovak Academy of Sciences) Vol. 2, no. 3, 1957

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 5, May 1958

ZALUDOVA, A.

Computation of critical values for the noncentral t test on punched cards.

p. 287 (STROJE ZPRACOVANI INFORMACI) Vol. 5, 1957,
Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,
March 1958

ZALUDOVA, A.

Analysis and control of foundry operations by the use of statistical methods. p.289.

SLEVARENSTVI. Vol. 2, No. 10, Oct. 1954. **Prague.**

SO: Monthly List of East European Accessions (EEAL) LC, Vol 5, No. 6, June 1956 Uncl.

ZALUDOVA, A.

Some experience with statistical analysis of operating conditions in a gray cast-iron foundry. p. 358.
SLEVARENSTVI, Prague, Vol. 2, no. 12, Dec. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6, June 1956, Uncl.

ZALUDOVÁ, A.

Some Experiences with the Statistical Analysis of Production Processes in a Grey Cast Iron Foundry. A. Zaludová. (*Slévárenství*, 1954, 2, (12), 356-360). (In Czech). A statistical analysis of operations in casting six-cylinder car engines disclosed that rejects resulted mainly from the non-adherence to prescribed schedules, i.e. in making core mixtures, core-drying, pouring temperature, etc. Permanent statistical quality control resulted in a decline of the reject rate.—F. F.

NG

ZALUDOVA, Agnes H.

The noncentral t-test (q-test) based on range in place of standard deviation. Acta techn Cz 5 no.2:143-185 '60. (EEAI 9:8)

(Distribution (Probability, theory))
(Probabilities)
(Sampling (Statistics))

ZALUDOVA, Anezka (Praha)

Role of mathematical statistics in mechanical engineering. Pokroky mat fyz astr 8 no.3:122-130 '63.

STETINA, Bohumil, inz.; ZALUDOVA, Anezka, dr

Working methods and optimum solution of the technical standardization tasks with some examples from foreign and domestic practice. Normalizace 12 no.8:213-218 Ag '64

1. State Commission for Development and Coordination of Science and Technology, Prague (for Stetina). 2. State Research Institute of Heat Technology, Prague (for Zaludova).

ZALUDOVA, A[illegible]nieszka, dr; JANKE, E. [translator]

Role of mathematical statistics in designing machines and some of the problems and methods. Pomiary 9 no.12:637-640 D'63.

1. Statni Vyzkumny Ustav Tepelne Techniki, Praha (for Zaludova).

ZALUGA, V.P., inzh.

Light characteristics required of pavements. Avt.dor. 28 no.11:23-24 N '65. (MIRA 18:11)

1. ZALUKAEV, I.

2. USSR (600)

4. Quinoline

7. Bimolecular alkylidene arylamines. Part 2. Structure of bromination products of 1-benzoyl-2-methyl-4-aniline-1,2,3,4-tetrahydroquinoline.
Latv. PSR Zin. Akad. Vestis No.3, 1951

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

ZALUKAYEV, L.P.

α-Nitroacetophenone-o-carboxylic acid and its derivatives.
Zhur.ob.khim. 26 no.3:914-919 Mr '56. (MLRA 9:8)

1. Institut khimii Akademii nauk Latviyskoy SSR.
(Acetophenonecarboxylic acid)

ZALUKAYEV, L.P.; MOISEYEV, V.V.

Structure and reactivity of β-diketones. Zhur. org. khim. 1 no.8:1375-1377 Ag '65. (MIRA 18:11)

1. Voronezhskiy gosudarstvennyy universitet.

ZALUKAYEV, L.

Preparation of 1-naphthyl[illegible] methane and its derivatives. L. Zalukajevs, and R. Vanag (Inst. Chem. Acad. Sci. Latvian S.S.R., Riga). Zhur. Obshchei Khim. 25, 907-13

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1°, which with 10% NaOH gave 66% 4-bromo-1-naphthylnitromethane, m. 91-2° (from EtOH). G. M. K.

Preparation of 1-naphthylnitromethane and its derivatives. L. Zalukajevs and E. Vanags. *J. Gen. Chem. U.S.S.R.* 26, 657-61(1956)(Engl. translation).—See *C.A.* 50, 13858e.

B. M. R.

2

ZALUKAYEV, L.; VANAG, E.

Preparation of 2-nitromethylquinoline and of its derivatives.
Zhur.ob.khim. 26 no.9:2639-2642 S '56. (MLRA 9:11)

(Quinoline)

ZALUKAYEV, L.; VAHAG, E. [Vanags].

Synthesis of ω-nitroethyl-p-nitrobenzene. Zhur.ob.khim.26 no.11:3115-3119 N '56. (MIRA 10:1)

1. Institut khimii Akademii nauk Latviyskoy SSR.
(Benzene)

ZALUKAYEV, L.

Addition of 1,3-indandione and of its nitro derivative at the multiple bond. Zhur.ob.khim.26 no.11:3125-3132 N '56. (MIRA 10:1)

1. Institut khimii Akademii nauk Latviyskoy SSR.
(Indandione)

7 7 1-3

Reaction of N-methylaniline with acetaldehyde

113.

quinaldine. G. M. Kosolapoff

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ZALUKAYEV, L.; VANAGS, E.

Preparation of α-naphthylnitromethane and of its derivatives. (MIRA 9:8)
Zhur.ob.khim. 26 no.2:607-613 F '56.

1. Institut khimii Akademii nauk Latviyskoy SSR.
(Methane)

ZALUKAYEV, L. P.

ZALUKAYEV, L. P. -- "Mechanism of Quinaldine Syntheses." Latvian State U, 1952 (Dissertation for the Degree of Candidate of Chemical Sciences)

SO: Izvestiya Ak. Nauk Latviyskoy SSR, No. 9, Sept., 1955

ZALUKAYEV, L.P.; ZHELTUKHINA, T.I.

Structure of a dimer of 2,2,4-trimethyl-1,2-dihydroquinoline.
Izv.vys.ucheb.zav.;khim.i khim.tekh. 5 no.2:277-279 '62.
(MIRA 15:8)

1. Voronezhskiy gosudarstvennyy universitet i Voronezhskiy sel'skokhozyaystvennyy institut.
(Quinoline)

ZALUKAYEV, L.P.; BANKOVSKIY, Yu.A.

Preparation of quinaldine without the use of acids. Dokl. AN SSSR 100 no.4:705-706 F '55. (MIRA 8:6)

1. Institut khimii Akademii nauk Latviyskoy SSR. Predstavleno akademikom I.N.Nazarovym.
(Quinaldine)

ZALUKAYEV, L.

✓ 2-Nitro-2-phenyl-1,3-indandione and its transformation in alkaline medium. L. Zalukajevs. *Latvijas PSR Zinātņu Akad. Vēstis* 1952, No. 11(Whole No. 64), 129-34 (in Russian).—2-Nitro-2-phenyl-1,3-indandione (I), m. 122-3°, was obtained in 77% yield by nitration of 2-phenyl-1,3-indandione with a mixt. of 200 ml. glacial AcOH and 100 ml. nitric acid (d. 1.38). 2-$MeO_2CC_6H_4COCH(NO_2)Ph$ (II), m. 103-4°, was prepd. in 98% yield, by dissoln. of I in a 5% soln. of MeONa in MeOH and acidification. The Et ester (III) of II, m. 71-2°, was prepd. in 81% yield from I by treating it with EtONa in EtOH soln. I and III did not change on prolonged boiling in MeOH. II free acid (IIA), m. 135-7°, was prepd. from the II or the Et ester by dissoln. in 6% NaOH and acidification at room temp. 3-(α-Nitrobenzylidene)phthalide, yellow platelets, m. 105-6° was prepd. by dissoln. of 1 g. IIA in 6 ml. Ac_2O and leaving overnight. Andrew Dravnieks

ZALUKAYEV, L.

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Simplified method of preparation of 2-nitro-1,3-indandione. L. Zalukajevs and L. Suchanova. Latvijas PSR Zinātņu Akad. Vēstis 1952, No. 7(Whole No. 60), 117-18 (in Russian).—Indandione (20 g.) was dissolved in a mixt. of 100 ml. glacial AcOH and 100 ml. HNO_3 (d. 1.38), heated to 60-65° and suddenly chilled gave 20.5 g. 2-nitro-1,3-indandione, m. 120°, also prepd. by slow heating of 13 g. I to 60° in mixt. of 65 ml. 80% AcOH and 40 ml. HNO_3, with yield of 12 g.

Andrew Dravnieks

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ZALUKAYEVS, L

Preparation of 2-nitromethylquinoline and its derivatives. L. Zalukajevs and [illegible] Obshchei Khim. 26

Zalukajevs, L.

Interaction of nitroalkylbindones with sodium alcoholates. G. Vanags, L. Zalukajevs, and L. Suchanova (Inst. Chem., Acad. Sci. Latv. S.S.R., Riga). *Latvijas PSR Zinatnu Akad. Vestis* 1953, No. 10 (Whole No. 75), 137-9 (in Russian).—In analogy to 2-substituted 2-nitroindandione, the nitroalkylbindones (I) were found to react with EtONa and MeONa with rupture of the five-membered nitro-group-bearing ring. Syntheses and reactions: (*A*) I (R = Me) is made from 7.8 g. methylbindone (II) heated at 65° with 40 ml. glacial AcOH and 40 ml. HNO_3 (d. 1.38); it was recrystd. from glacial AcOH to yield 7.9 g. yellow crystals, m. 217-19°. (*B*) *o*-[β-Nitro-α-(1,3-dioxo-2-indanylidenepropyl)]benzoic acid (III) Me ester (IV): I (16.7 g.) dissolved in 100 ml. 3% MeONa, poured into water, acidified

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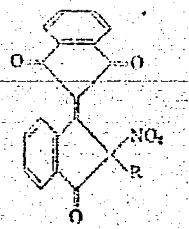
with H_2O_2 yields 17 g. IV, yellow, m. 146-7°. (*C*) I (2 g.) dissolved in 40 ml. of 5% EtONa as above yields 1.8 g. Et ester (V) of III, yellow, m. 123-4°. (*D*) V (4 g.) heated with 30 ml. 5% NaOH, acidified, and the ppt. recrystd.



(I)

from EtOH yields 0.8 g. III, yellow, m. 209-10°; 2.5 g. IV boiled with 30 ml. 3% NaOH as above yielded 2.1 g. III, m. 207°, no m.p. depression when mixed with that obtained from V. — (*E*) I (R = $PhCH_2$) is made by dissolving 3 g. benzylbindone in 20 ml. glacial AcOH and 10 ml. HNO_3, and heating to 100°; yield, 1.4 g., yellow crystals, m. 201°. Me and Et esters of the $PhCH_2$ analog of III obtained as under *B* or *C*, m. 186-7°, and 136-7°, resp. Hydrolysis of these esters gave the corresponding acid, m. 198°. A. Dravnieks

ZALUKAYEVS, L.

Acidless preparation of several quinoline bases. L. Zalukajevs and J. Bankovskis (Inst. Chem., Acad. Sci. Latv. S.S.R., Riga). *Latvijas PSR Zinātņu Akad. Vēstis* 1955, No. 2 (Whole No. 91), 83-6 (in Russian).—In addn. to the prepn. of quinaldine, described in *C.A.* 49, 8967b, 2,6-dimethyl- and 2,8-dimethylquinolines were prepd. similarly from *p*- and *o*-toluidines in 19-32% yields, based on the amt. of the reacted material. 2,6,8-Trimethylquinoline was prepd. from 2,4-xylidine by a slightly modified procedure. Andrew Dravnieks

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ZALUKAYEV, L.

ZALUKAYEV, L.; VANAG., E

Preparation of α-naphthyl-nitromethane and 4-nitro-α-naphthyl-nitromethane. Dokl. AN SSSR 103 no.4:619-621 Ag '55. (MLRA 8:11)

1. Institut khimii Akademii nauk Latviyskoy SSR. Predstavleno akademikom I.N.Nazarovym

(Nitromethylnaphtalene)

ZALUKAYEVS, L.

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11 S 8 [illegible]

Transfer of reaction center in a chain with heteroatoms and the mechanism of the solvolytic cleavage of the carbon-carbon link. L. Zalukaev (Inst. Chem., Acad. Sci. Latvian S.S.R., Riga). Latvijas PSR Zinatņu Akad. Vēstis 1954, No. 5 (Whole No. 82), 91-104 (in Russian). CH —The structure and the interaction of 2-nitro-2-phenyl-1,3-indandione (I), o-PhC(NO$_2$)(OH)COC$_6$H$_4$CO$_2$H (II), and O$_2$NCHBz$_2$ (III) with various reagents were studied to investigate the conjunction of electrons of the C-C link with those of the N-O link in the chain C-C-N-O. I reacts with NaOAc and HCO$_2$Na in MeOH with opening of the 5-membered ring and formation of the Me ester of II. MeONa and EtONa also split the C-C link in the 5-membered ring with great ease. II must have an open-chain structure both in the free acid and the di-Na salt form, since it does not react with BzCl or with alcs. in the absence of catalysts, but easily reacts with NaHCO$_3$ with evolution of CO$_2$. In boiling water or H$_2$SO$_4$ II forms o-C$_6$H$_4$(CO)$_2$O in a reaction where the HO-bearing C is attacked by the CO$_2$H group. The C-C link in III is broken in AcOH in the presence of Zn(OAc)$_2$; BzCH$_2$NO$_2$ (IV) and BzOH result. In the presence of NaOAc the reaction goes further with formation of V from IV. The reactions are explained by the semiionic nature of the C-C bond in situation where one of the C atoms is linked to an electron donor, but the other to an acceptor. Such polarized bond is vulnerable to an attack by both nucleophilic and electrophilic ions. Andrew Dravnieks

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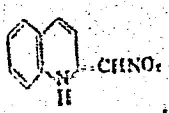
ZALUKAYEVS, L.

USSR

Nitration of quinophthalone. L. Zalukajevs (Inst. Latvijas PSR Chem., Acad. Sci. Latv. S.S.R., Riga). Zinātņu Akad. Vēstis 1953, No. 11 (Whole No. 76), 111-18(in Russian).—α-Nitroquinophthalone, yellow, m. 147-8°, was prepd. in 71% yield by nitration of 60 g. tech. quinophthalone (II) with a mixt. of 200 ml. 95% AcOH and 200 ml. nitric acid (d. 1.50), under intensive cooling. α-Quinolylnitromethane (III), yellow, m. 118-19° (or brown crystals, m. 122-23°, after recrystn. from EtOH), was prepd. by dissoln. of 60 g. II in 300 ml. 95% AcOH and 100 ml. nitric acid, and treatment of the solid ppt. with 400 ml. 10% NaOH at 60°, and acidifying with AcOH. The dibromo deriv. of III (IV), m. 86°, was prepd. by bromination of III in glacial AcOH. By boiling IV with an aq. alc. soln. of NaOH, the monobromo deriv. of III, m. 125-6°, was prepd. The following structure is proposed for III:



Andrew Dravnieks

ZALUKAJEVS, L.

USSR.

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Preparation of phenylnitromethane from phenylacetic acid. L. Zaļukajevs ~~(Inst. Chem., Acad.~~ Sci. Latv. S.S.R., Riga, ~~Latvijas~~ *PSR Zinātņu Akad. Vēstis* 1954, No. 3 (Whole No. 80) 101-6 (in Russian).—Benzylidenephthalide (I) was prepd. from 220 g. o-$C_6H_4(CO)_2O$ and 200 g. $PhCH_2CO_2H$ by slow boiling with 5 g. anhyd. AcOK (5 g.), with continuous removal of water for 6 hrs.; cooling to 100°, and dumping the mixt. into EtOH to give 300 g. I, m. 99-100°. 2-Phenyl-1,3-indandione (II) was prepd. by dissolving 55 g. I in 3% NaOMe soln. in 350 ml. MeOH, or NaOEt soln. in EtOH, adding water, acidifying with H_2SO_4, and recrystg. from glacial AcOH; yield 45.6 g., m. 146-8°. 2-Nitro-2-phenylindandione (III) was prepd. by treating 81 g. II with 150 ml. HNO_3 (d. 1.39) in 300 ml. 98% AcOH at 30-40° with cooling and washing the resulting ppt. with EtOH; yield 72 g., m. 117-19° (recrystd. from glacial AcOH, m. 121-2°). $PhCH_2NO_2$ (IV) was prepd. from 23 g. III by boiling 30 min. with 200 ml. half-concd. NH_4OH (a dark-red oil sptd.), cooling the mixt., extg. with Et_2O, acidifying with AcOH, extg. again, and combining the exts., distg., drying with Na_2SO_4, extg. with Et_2O, etc., and finally distg. *in vacuo*: yield, 7.4 g., b_2 114-15°. Alternate synthesis

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conditions with lower yields are described. o-$HO_2CC_6H_4CH_2$-$CH(NO_2)Ph$ (V) was obtained by stirring 48 g. III with 200 ml. 10% aq. NaOH soln., adding 200 ml. water after 5 min. and stirring continued 5 min.; crude V pptd. from the filtrate upon addn. of HCO_2H or H_2SO_4 and the reddish oily ppt. recrystd. from $CHCl_3$ [illegible] 33.2 g. V, m. 123-9°. An intermediate removal of the [illegible] improved the synthesis, yielding a product, m. 14[illegible]° (from warm AcOH). IV [illegible] by either of the procedures: (1) di-Na salt [illegible] g.) was mixed with 40 ml. H_2O, steam distd., extd. with Et_2O, and the ext. dried with Na_2SO_4, and vacuum-distd. yielding 2.25 g. IV, [illegible] 1.2 13[illegible], or (2) 11.3 g. V in [illegible] ml. toluene and 17 ml. pyridine, kept 24 hrs., [illegible] evapd. [illegible]

ZALUKAJEVS, L.

Chemical Abst.
Vol. 48
Apr. 10, 1954
Organic Chemistry

The reanilation of carbonyl compounds. L. Zalukajevs (Univ. Latvia). *Latvijas PSR Zinātņu* [redacted] 1952, No. 2(55), 135-8(in Russian).—A study was made of the reaction between anils and aldehydes, which in many cases proceeds according to the scheme: $R^1R^2C{:}NPh + R^3CHO \rightarrow R^3CH{:}NPh + OCR^1R^2$. This reaction was named reanilation. *Cinnamaldehyde anil*, red crystals from alc., m. 109°, was obtained in 5-g. yield by heating 9.05 g. PhCH:NPh 1 hr. at 100° (or 30 min. at 200°) with 6.6 g. PhCH:CHCHO; the residue was BzH; the same product could be obtained in EtOH soln. *Trimer of formaldehyde anil (anhydroformaldehydeaniline)*, m. 140-1°, was obtained in 11-g. (96%) yield from 5 ml. 40% HCHO soln. and 5 g. $PhNH_2$ in 20 g. Me_2CO and 5 g. H_2O. *4,5-Dioxo-1,2-diphenyltetrahydropyrrole anil*, m. 217°, was obtained in 0.20-g. yield by heating 15 min. on a water bath 0.80 g. PhCH:NPh in 15 ml. alc. with 1.10 g. 4,5-dioxo-1,2-diphenyltetrahydropyrrole, m. 150°; the residue was BzH. *Benzaldehyde p-hydroxyanil*, m. 183-3°, was obtained by heating 1 g. $p\text{-}HOC_6H_4N{:}CMe_2$, m. 172-3° (cf. *Ber.* 17, 3006) with 1.2 g. PhCH:NPh in 10 ml. alc. Edward G. Mazurs

ZALUKAYEV, L

ZALUKAJEVS, L.

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Chemical Abst.
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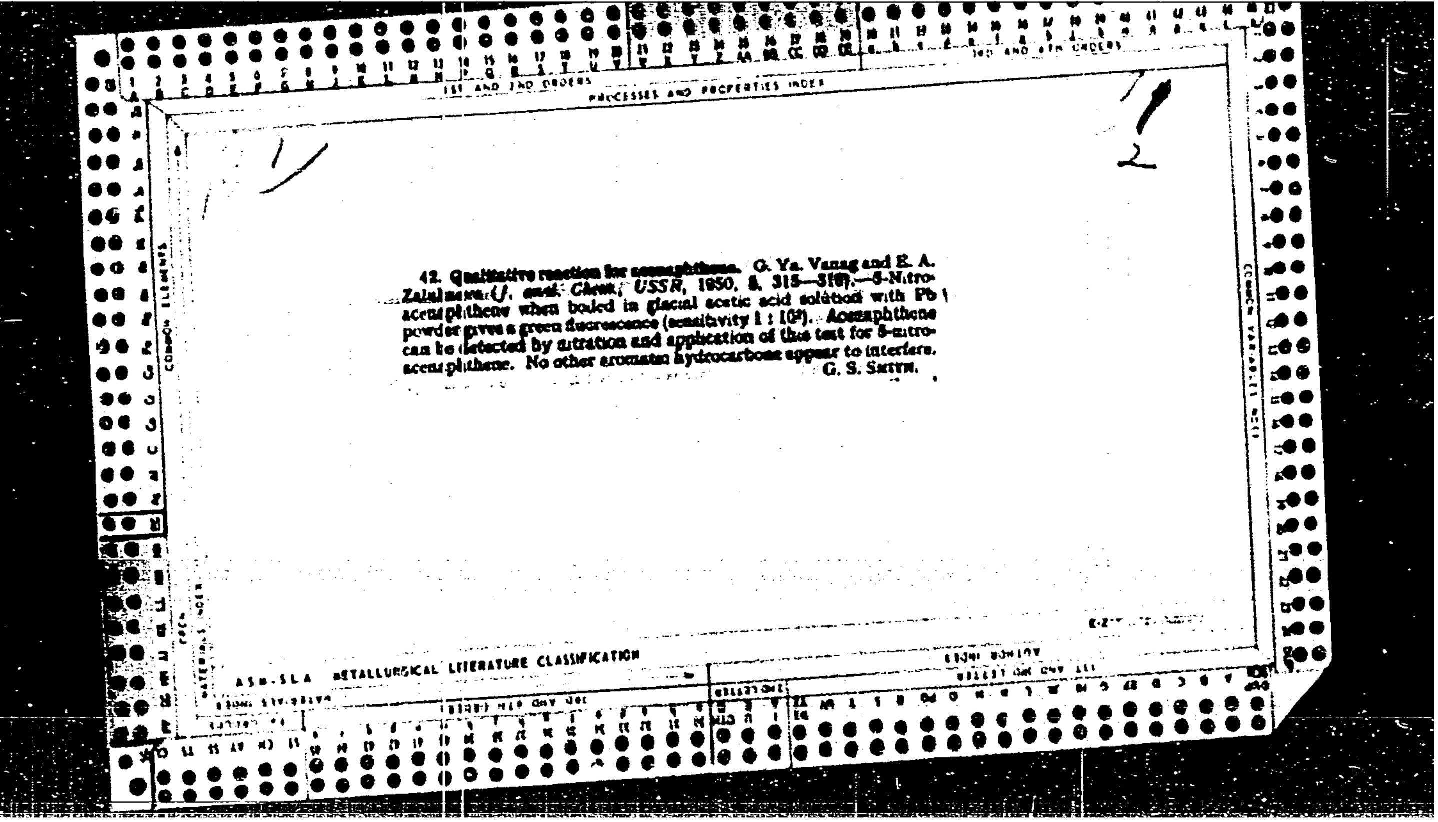
Organic Chemistry

The synthesis [illegible] 2-nitro-2-substituted-1,3-indandiones and of primary aliphatic nitro compounds on their basis. L. Zalukajevs. *Latvijas PSR Zinatnu Akad. Vestis* 1952, No. 10(63), [illegible] (in Russian).—Only two 2-nitro-2-substituted-1,3-indandiones, o-$C_6H_4(CO)_2C(NO_2)R$, are known: the Ph and $PhCH_2$ derivs. Recently, a general and simple method of synthesis of these compds. was found in the direct nitration of 2-substituted-1,3-indandiones with concd. HNO_3 in glacial AcOH [cf. *Latvijas PSR Zinatnu Akad. Vestis* 1951, No. 8(49), 1303]. These compds. are interesting as a starting material for the synthesis of primary aliphatic nitro compds. according to the following scheme: o-$C_6H_4(CO)_2C(NO_2)R$ + 2NaOH → o-$C_6H_4(CO_2Na)_2$ + RCH_2NO_2. *2-Nitro-2-phenyl-1,3-indandione*, m. 121-2° (from alc.), was obtained in 16-g. (69%) yield by heating 20 g. phenylindandione, suspended in 200 ml. glacial AcOH, to 75-80° with 60 ml. HNO_3 (d. 1.38) and cooling. *2-Nitro-2-ethyl-1,3-indandione* (I), m. 88-90°, was obtained in 40% yield by cooling to 0° 60 ml HNO_3 (d. 1.51), 60 ml. glacial AcOH, and 10 g. ethylindandione, m. 63-4°, in 150 ml. glacial AcOH. Distn. of 5.3 g. I with 140 ml. 2% NaOH yielded 0.9 g. (43%) nitropropane, b. 133-4°; acidifying the alk. residue from the distn. gave 3 g. [illegible] $C_6H_4(CO)_2O$, m. 200-4°. Edward G. Mazurs


1ST AND 2ND ORDERS
PROCESSES AND PROPERTIES INDEX
3RD AND 4TH ORDERS
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42. Qualitative reaction for acenaphthene. G. Ya. Vanag and E. A. Zalukaeva (J. anal. Chem., USSR, 1950, 5, 315—316).—5-Nitroacenaphthene when boiled in glacial acetic acid solution with Pb powder gives a green fluorescence (sensitivity 1 : 10^{5}). Acenaphthene can be detected by nitration and application of this test for 5-nitroacenaphthene. No other aromatic hydrocarbons appear to interfere.

G. S. SMITH.

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Qualitative test for acenaphthene. G. Ya. Vanag and B. A. Zaluksaeva (Latvian State Univ., Riga, U.S.S.R.). *Zhur. Anal. Khim.* 5, 315-18(1950).—Boiling a soln. of 5-nitroacenaphthene in glacial AcOH in the presence of Pb powder produces a green fluorescence. This specific reaction is used to detect acenaphthene (I). To this end I is nitrated with HNO_3 or a mixt. of HNO_3 1 and H_2SO_4 3 parts. Two parts of this mixt. are combined with 1 part of H_2O and the product is used for nitrating I in glacial AcOH or benzine. The nitration product is dild. with H_2O, the ppt. formed is filtered off, dissolved in glacial AcOH, and boiled with Pb powder. If there is no ppt. the nitration product is extd. with benzine, the benzine is removed, and the test finished as before. Very small quantities of I are nitrated preferably in benzine. Anthracene, naphthalene, phenanthrene, fluorene, biphenyl, perylene, β-methylnaphthalene, 1,6-dimethylnaphthalene, diphenylene oxide, naphthalic acid anhydride, etc., did not react. Nor did other derivs. of I give this reaction. The presence of these hydrocarbons severally or combined did not interfere with the test. Concd. HCl and H_2SO_4 did not interfere, HNO_3 destroyed the fluorescence as did to a lesser degree H_2O_2. Oxalic, benzoic, citric, tartaric, and succinic acids did not interfere. Glacial acetic acid could be replaced by propionic, butyric, lactic, and monochloroacetic acid. Di- and trichloroacetic acid were unsuitable. M. Hosch

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

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2859. QUALITATIVE TEST FOR ACENAPHTHENE. Vanag, G. Ya. and Zalukaeva, E. A. (Zh. Anal. Khim. (J. Anal. Chem.), 1950, vol. 5, 315-318; abstr. in Chem. Abstr., 1950, vol. 44, 10605).

Boiling a solution of 5-nitroacenaphthene in glacial AcOH in the presence of Pb powder produces a green fluorescence. This specific reaction, which has a sensitivity of 1:1,000,000, is used to detect acnaphthene (I). To this end (I) is nitrated with HNO_3 or a mixture of HNO_3 1 and H_2SO_4 3 parts. Two parts of this mixtures are combined with 1 part of H_2O and the product is used for nitrating (I) in glacial AcOH or benzine. The nitration product is diluted with H_2O, the ppt formed is filtered off, dissolved in glacial AcOH, and boiled with Pb powder. If there is no precipitate the nitration product is extracted with benzine, the benzine is removed, and the test finished as before. Very small quantities of (I) are nitrated preferably in benzine. Anthracene, naphthalene, phenanthrene, fluorene, biphenyl, perylene, β-methylnaphthalene, 1,6-dimethynaphthalene, diphenylene

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION oxide, naphthalic acid anhydride, etc. did not react. Nor did other derivatives of (I) give this reaction. The presence of these hydrocarbons severally or combined did not interfere with the test. Concentrated HCl and H_2SO_4 did not interfere, HNO_3 destroyed the fluorescence as did to a lesser degree H_2O_2. Oxalic, benzoic, citric, tartaric, and succinic acids did not interfere. Glacial acetic acid could be replaced by propionic, butyric, lactic, and monochloroacetic acid. Di- and tri-chloroacetic acid were unsuitable.

ZALUKAJEVS, L.

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Bimolecular alkylideneарylamines. I. Structure of ethylideneaniline. L. Razuvaev. *Latvijas PSR Zinātņu Akad. Vēstis* 1951, 131-6; cf. Eibner, *Ann.* 318, 58(1901).—The bimol. ethylideneaniline, m. 126°, is *trans-2-methyl-4-anilino-1,2,3,4-tetrahydroquinoline* (I), formed by cyclization of initially formed PhNHCHMeCH$_2$CH:NPh. Addn. of 11.0 ml. AcH to 18.6 g. PhNH$_2$ in 300 ml. EtOH and 200 ml. H$_2$O gave after 2 days 93% I, m. 126° (from H$_2$O), 2.7 g. of which with 11 g. KMnO$_4$ in the presence of MgSO$_4$ gave quinaldine. I heated with H$_2$O 6 hrs. remains unchanged. Heated to 300° briefly it yields quinaldine and PhNH$_2$. If the reaction mixt. used in the prepn. of I is evapd. after but 1 hr. of reaction and the residue heated with Ac$_2$O there is formed quinaldine. Refluxing 3 g. I with 10 ml. PhNO$_2$ 7 hrs. yields quinaldine. Letting I stand 24 hrs. with excess Ac$_2$O gave the di-Ac deriv., m. 187-8°; this (3.4 g.) treated with 1.7 g. Br in CHCl$_3$ gave $C_{20}H_{21}O_2N_2Br$, m. 153°, which is a direct contradiction to the probable behavior on bromination of the formulation of I given by Eibner (*loc. cit.*), which should yield a dibromide. **II. Structure of the products of bromination of 1-benzoyl-2-methyl-4-anilino-1,2,3,4-tetrahydroquinoline.** L. Zalukajevs. *Ibid.* 469-72.—In previous work it was shown that bimol. ethylideneaniline, m. 126°, is *trans-2-methyl-4-anilino-1,2,3,4-tetrahydroquinoline* and not *trans*-1,3-dianilino-1-butene. Its *Mono-Bz deriv.* (I) (3 g.) in CHCl$_3$ with 1 g. Br gave 3 g. colorless solid, m. 160-3° (after exposure to air), which is a *HBr salt*, since with NaHCO$_3$ it liberates CO$_2$ from the latter, yielding a base $C_{23}H_{21}ON_2Br$, m. 211-12°. This refluxed 5 hrs. with 1:1 H$_2$SO$_4$ gave quinaldine and p-BrC$_6$H$_4$NH$_2$ (isolated as the Ac deriv.). I (6.5 g.) with 3.05 g. Br gave $C_{23}H_{20}ON_2Br_2$, m. 239°, forming a *HBr salt*, m. 180-6°; hydrolysis of this with H$_2$SO$_4$ and treatment with BzCl gave quinaldine and 2,4-Br$_2$C$_6$H$_3$NH$_2$ (Bz deriv., m. 133-4°). **III. Thermal cleavage of 2-methyl-4-anilino-1,2,3,4-tetrahydroquinolines.** *Ibid.* 747-52.—To 9.3 g. PhNH$_2$ in 10 ml. EtOH was added with cooling 4.4 g. AcH, after an unstated period, the EtOH distd. off and the residue taken up in Et$_2$O; distn. gave 1 g. PhNH$_2$, 3.7 g. quinaldine, and 2.3 g. product, b_{10} 110-15°, converted with HNO$_2$ to a nitroso deriv. which, heated with Sn-HCl, yielded some tetrahydroquinaldine (HCl salt, m. 188°). Adding 20 g. AcH to 18.8 g. 2-aminopyridine and letting stand 12 hrs. gave 17 g. *MeCH(NHC$_5$H$_4$N)$_2$*, m. 113-16° (from C$_6$H$_6$). This gently refluxed 15 min. gave 5.5 g. 2-aminopyridine as a distillate, some MeCH:CHCHO, and 4 g. brown powder, which did not melt sharply and contained 14.5% N; this yielded MeCH:CHCHO with H$_2$SO$_4$. Apparently this was a condensation product of 2-(ethylideneamino)pyridine, formed by cleavage of the original base. *trans*-2-Methyl-4-anilino-1,2,3,4-tetrahydroquinoline (I) (cf. 2nd preceding abstr.) left behind a mother liquor, which, treated with 18.0 g. PhNH$_2$ and 5.0 ml. AcH and allowed to stand 3 days, yielded 9 g. colorless solid, m. 85-6°, identified as *cis*-I, identical with Eibner's base [*Ann.* 318, 58(1901)]. Thermal decompn. of either *cis*- or trans-I gave quinaldine, PhNH$_2$ and H.

G. M. Kosolapoff

VANAGS, G.; ZALUKAJEVS, L.

Products of reduction of 2-nitro-2-benzhydryl-1,3-indandione and benzhydrylnitromethane. Latvijas PSR Zinâtnu Akad. Véstis '51, 753-6. (MLRA 5:10)
(CA 47 no.22:12332 '53)

1. ZALUKAYEV, L.

2. USSR (600)

4. Arlamines

7. Investigations of bimolecullar of alkylidene arylamines. Part 3.
Latv. PSR Zin. Akad. Vestis. 5. 51.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

1. ZALUKAYEV, L.

2. USSR (600)

4. Indandione

7. Methods of preparation of disubstituted nitro-indandione derivatives. Latv. PSR Zin. Akad. Vestis, no. 8, 1951.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

ZALUKAYEV, L.

Obtaining 2-nitro-2-substituted indandiones - 1.3 and primary aliphatic nitro compounds on their base. Latv.PSR Zin.Akad.Vēstis no.1:147-149 '52.
(MLRA 6:6)

1. Institut khimii AN Latviyskoy SSR. (Indandiones) (Nitro compounds)

ZALUKAYEV, L.

Salts

Isomerization of anil salts of cinnamic aldehyde. Zhur. ob. khim. 22 (84) no. 3. '52.

Monthly List of Russian Accessions, Library of Congress, August, 1952. Unclassified.

ZALUKAJEVS, L.

2

Synthesis of 2-nitro-2-(*m*-nitrophenyl)- and 2-nitro-2-(*p*-nitrophenyl)-1,3-indandiones, and their transformations in alkaline medium. L. Zalukajevs. *Latvijas PSR Zinātņu Akad. Vēstis* 1953, No. 4(Whole No. 60), 85-90(in Russian).—2-Nitro-2-phenyl-1,3-indandione (I) (0.1 mole) boiled with 11 ml. $PhNH_2$ in 250 ml. EtOH gave a cryst. ppt. of phthalanil on cooling; the filtrate was treated with dil. H_2SO_4 and distd. with steam to yield 31% $PhCH_2NO_2$. 2-Nitro-2-(*m*-nitrophenyl)-1,3-indandione (II), m. 147-8°, was prepd. by mixing 10 g. I with 100 ml. HNO_3 (d. 1.52) and recrystn. from glacial AcOH. Me α-nitro-α-(*m*-nitrophenyl)acetophenone-*o*-carboxylate, m. 146°, yield 91%, was prepd. by soln. of 20 g. II in 200 ml. 3% MeONa soln. in MeOH, and acidification with dil. H_2SO_4; the Et ester, m. 101°, yield 88%, was prepd. similarly from 15 g. II in 120 ml. 3% EtONa in EtOH. *m*-$O_2NC_6H_4CH_2NO_2$, m. 95-6°, was prepd. in 70% yield by soln. of 20 g. II in 400 ml. aq. 5% NaOH, acidification with AcOH, and recrystn. from AcOH. *p*-Nitrobenzylidenephthalide (III) was prepd. by nitration of 120 g. benzylidenephthalide (IV) with a mixt. of 300 ml. HNO_3 (d. 1.48) and 600 ml. glacial AcOH at room temp., or from 10 g. IV with 150 ml. HNO_3 at 70°. 2-(*p*-Nitrophenyl)-1,3-indandione (V), was prepd. in 90% yield by soln. of 6 g. III in 150 ml. 2% MeONa and acidification with H_2SO_4. 2-Nitro-2-(*p*-nitrophenyl)-1,3-indandione (VI), m. 162°, was prepd. in 64% yield by mixing 6 g. V in 60 ml. glacial AcOH with 15 ml. HNO_3 (d. 1.52) and 15 ml. glacial AcOH. If less concd. acid was used, a compd., m. 244-5°, probably an oxidation product from two moles of 2-(*p*-nitrophenyl)-1,3-indandione, α,β-diphthalyl-α,β-di(*p*-nitrophenyl)ethane, was obtained. *p*-$O_2NC_6H_4CH_2NO_2$, m. 92°, was prepd. in 83% yield by soln. of 2.1 g. VI in 100 ml. 5% aq. NaOH at room temp. and acidification.

A. Dravnieks

ZALUKAYEV, L.P.

USSR/ Chemistry - Synthesis processes

Card 1/1 Pub. 22 - 25/60

Authors : Zalukayev L. P., and Bankovskiy, Yu. A.

Title : The acidless method for the derivation of quinaldine

Periodical : Dok. AN SSSR 100/4, 705-706, Feb 1, 1955

Abstract : A simple method for the synthesis of quinaldine is described. It is shown that the derivation of larger quinaldine amounts does not require nitrosation or ether application. A mixture of equimolecular amounts of aniline and acetaldehyde in ethyl alcohol subjected to fractionation was found to be perfectly sufficient for the derivation of quinaldine. Four references: 2 USSR and 2 German (1892-1953).

Institution : Academy of Sciences, Latv. SSR, Institute of Chemistry

Presented by : Academician I. N. Nazarov, November 3, 1954

ZALUKAYEV, L.

USSR/Organic Chemistry - Synthetic Organic Chemistry E-2

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4338

Author : Zalukayev, L., Vanag, E.
Title : Preparation of Alpha-Naphthylnitromethane and Its Derivatives

Orig Pub : Zh. obshch. khimii, 1956, 26, No 2, 607-613

Abstract : Alpha-naphthylnitromethane (I), 4-nitro-I (II) and 4-bromo-I (III) were prepared by the previously developed method (RZhKhim, 1955, 21082). Reaction of alpha-naphthylacetic acid (IV) with phthalic ahnydride (V) was used to prepare alpha-naphthylidenephthalide (VI) which on action of CH_3ONa undergoes isomerization to 2-(alpha-naphthyl)-indandione-1,3 (VII). By nitration of VII was obtained 2-nitro-2-(alpha-naphthyl)-indandione-1,3 (VIII). Hydrolysis of VIII with NaOH gives I. On nitration of VI there is formed 4-nitro-alpha-naphthylidenephthalide (IX) which is isomerized to 2-(4-nitro-alpha-naphthyl)-

Card 1/4 - 51 -

USSR/Organic Chemistry - Synthetic Organic Chemistry E-2

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4338

acidified with diluted CH_3COOH and I is separated, yield of crude product 5.2 g, MP 71-72° (from glacial CH_3COOH). To 15 g VI are added 90 ml HNO_3 (d 1.34) in glacial CH_3COOH, mixture is heated 5 minutes at 40-45°, the precipitate is boiled with C_6H_6, and there are separated 9.8 g IX, MP 257°. IX is isomerized analogously to VI to get X, yield 70%, MP 203-204° (from glacial CH_3COOH). From 19 g X after nitration at 45° is obtained 2-nitro-2-(4-nitro-alpha-naphthyl)-indandione-1,3 (XIII), yield 74%, MP 165-166° (from CH_3COOH). Hydrolysis of XIII, analogously to VIII, gives II, yield 66%, MP 116-117° (from alcohol). 0.5 g II and 5 ml 80% H_2SO_4 are heated for 30 minutes and diluted with water, precipitate is treated with a solution of $NaHCO_3$, acidified and XI is separated, MP 219-220° (from aqueous alcohol). To 2.3 g IX and 4.5 g $Na_2Cr_2O_7$ in 60 ml glacial CH_3COOH are

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USSR/Organic Chemistry - Synthetic Organic Chemistry E-2

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4338

added 5 ml concentrated H_2SO_4, and after the usual treatment there is obtained XI, yield 25%. To a boiling solution of 60 g VI in 450 ml CCl_4 are added 24 ml Br_2 in CCl_4, boiling is continued for 18 hours, after which the tribromo-derivative is separated, yield 58%, MP ~200°, 65 g of the latter and 100 g Zn are boiled 1 hour in 500 ml glacial CH_3COCH, XII is isolated, yield of the crude product 55%, MP 223-224° (from CH_3COCH or benzene). From 15 g crude XII is obtained the isomeric diketone, yield of crude product 14.5 g , MP 207-208° (from alcohol) 9.5 g diketone are nitrated as described above and there is obtained the 2-nitro-2-(4-bromo-alpha-naphthyl)-indandione-1,3, yield 45%, MP 147-148° (from CH_3COOH), which is hydrolyzed with a 10% solution of NaOH to get III, yield of crude product 90%, MP 91-92° (from alcohol).

Card 4/4

ZALUKAYEV~~S~~, L.

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Reaction of *N*-methylaniline with acetaldehyde. L. Zalukajevs. *Proc. Acad. Sci. U.S.S.R., Sect. Chem.* 110, 607-10(1956)(English translation).—See *C.A.* 51, 8002e. B. M. R.

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ZALUKAYEV, L.P.

ZALUKAYEV, L.; VANAG, E.

Nitration of phthalones. Zhur. ob. khim. 27 no.12:3278-3282 D '57.
(MIRA 11:3)

1. Institut khimii Akademii nauk Latviyskoy SSR.
(Nitration) (Phthalones)

ZALUKAYEV, L.

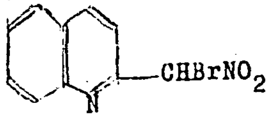
79-2-44/64

AUTHORS: Zalukayev, L., Vanag, E.,

TITLE: Some Reactions of 2-Nitromethylquinoline (Nekotoryye reaktsii 2-nitrometilkhinolina) 1. The Salt Formation and Effect of Haloids (Soleobrazovaniye i deystviye galoidov)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 2, pp. 483-486 (USSR)

ABSTRACT: The mobility of the hydrogen atoms and the great reactivity of the methyl group in 2-nitromethylquinoline admits an easy salt formation, a good solubility in lyes, as well as (at room temperature) an extremely simple substitution of the hydrogen atoms of the side chain by chlorine and bromine. The formula



is ascribed to the monobromide, since the following reasons indicate that the halogen is aromatically bound: the compound is easily soluble in lyes, here it is always separated unchanged after acidification. The bromine is easily cleft off by the influence of benzolchloride. The ultraviolet spectrum of monohalogen compounds is according to its character similar to that of 2-nitromethylquinoline. The power

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Some Reactions of 2-Nitromethylquinoline. I. The Salt Formation 79-2-44/64
and Effect of Haloids.

of resistance against eyes must be especially pointed out. The behaviour of chlorine- and dihalogen compounds is analogous and the bonds to the carbon atom are also of aromatic character. The introduction of halogen to the nitro group weakens to a great extent the basic character of the quinoline ring. The halogen compounds of the 2-nitromethylquinoline are very weak bases which are not soluble in diluted acids. The preparation methods for potassium and ammoniumsalt, the mono- and dihalogen derivates as well as the chlorine-bromine substitution and all specific data of the compounds are given. There are 2 figures, and 2 Slavic references.

ASSOCIATION: Institute of Chemistry AS Latvian SSR (Institut khimii Akademii nauk Latviyskoy SSR)

SUBMITTED: January 14, 1957

AVAILABLE: Library of Congress

Card 2/2

Zalukayev L.

5.3610

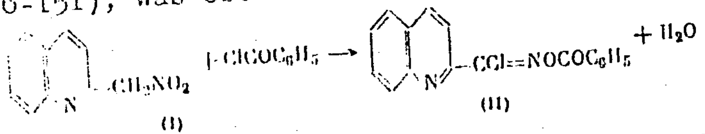
77880
SOV/79-30-2-31/78

AUTHORS: Zalukaev, L., Vanag, E. V.

TITLE: Some Reactions of 2-Nitromethylquinoline. II. The Reaction With Benzoyl Chloride

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 2, pp 506-510 (USSR)

ABSTRACT: 2-Nitromethylquinoline I was heated with benzoyl chloride. The product, corresponding to formula II (mp 156-151), was obtained in 60% yield.



Sodium methoxide (3% solution) reacts with II forming methyl benzoate and quinoline.

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Some Reactions of 2-Nitromethylquinoline.
II. The Reaction With Benzoyl Chloride

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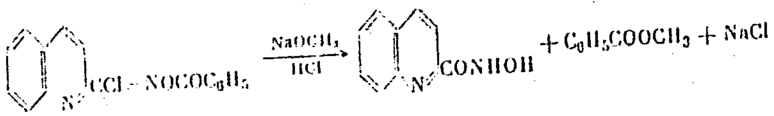
SOV/79-30-2-31/78



Quinoylhydroxamic acid is hydrolyzed with HCl and decarboxylated on distillation. As a result, the action of benzoyl chloride and sodium methoxide proceeds with denitromethylation of 2-nitromethylquinoline. H_2SO_4 reacts with the benzoylated product, forming a large amount of benzoic acid and a compound (mp 136°) which, according to its nitrogen content, corresponds to benzoyl quinoylhydroxamic acid III (mp 136 dec.). Benzoyl chloride reacts with 2-nitromethylbenzothiazol forming compound IV (mp 152-153°).

Card 2/3

Some Reactions of 2-Nitromethylquinoline.
II. The Reaction With Benzoyl Chloride

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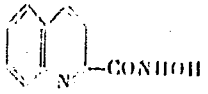
SOV/79-30-2-31/78



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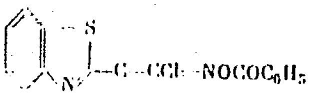

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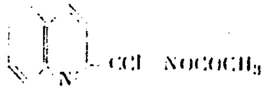
2-Nitromethylquinoline (1g) was reacted with acetyl chloride (5 ml) and compound VII was obtained (0.45 g; mp 146-148°).



(VII)

There are 5 references, 4 Soviet, 1 German.

ASSOCIATION: Voronezh Agricultural Institute and Institute of Chemistry, Academy of Sciences, Latvian SSR (Voronezhskiy sel'skokhozyaystvennyy institut i institut khimii adademii nauk Latviyskoy SSR)

SUBMITTED: January 5, 1959

Card 3/3

Zalukayev L.

Distr: 4E2c(j) 7

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2May
1

Synthesis of 6-chloro-8-mercaptoquinoline and its reactions with cations. J. Bankovskis, L. Zalukajevs, and R. Platnieks. *Latvijas PSR, Zinatnu Akad. Vestis* 1958, No. 4, 95-103(in Russian).—6-Chloro-8-mercaptoquinoline dihydrate was prepd. according to Edinger (*C.A.* 2, 1975) from 6-chloroquinoline, prepd. according to La Coste (*Ber.* 15, 559(1882)); total yield from quinoline 19-23%. The soly. of the Cu, Pd, Ni, Fe^{++}, Mn, V^{4+}, Co, Zn, Cd, Mo^{4+}, W^{4+}, Hg, Hg$_2$, Ag, Pb, Bi, Sb^{+++}, As^{+++}, As^{4+}, Se^{4+}, Os^{4+}, Ir^{4+}, Pt^{4+}, and Te^{++} inner complexes in C$_6$H$_6$, CCl$_4$, CHCl$_3$, CHBr$_3$, diethyl oxalate, ether, isoamyl ether, bromobenzene, nitrobenzene, dichloroethane, isoamyl alcohol, and isoöctane in acidic and alk. soln. is shown in a table. K. [illegible]

ZALUKAYEV, L.; VANAG, E.

Some 2-nitromethylquinoline reactions. Part 1: Salt formation and action of halogens. Zhur.ob.khim. 28 no.2:483-486 F '58.
(MIRA 11:4)

(Quinoline) (Halogenation)

AUTHORS: Zalukayev~~, L., Vanag~~, E. 79-12-22/43

TITLE: The Nitration of Phtalones (Nitrovaniye ftalonov).

PERIODICAL: Zhurnal Obshchey Khimii, 1957, Vol. 27, Nr 12, pp. 3278-3282 (USSR).

ABSTRACT: In earlier works the nitration process of quinophtalone and the hydrolytic clearage of the nitration product in to 2-nitromethylquinoline was described. Later the reaction with the homologs of quinaldine was used and a useful method for the alcoholysis of nitroquinophtalone to the esters of α-nitro- α - (2 - quinolyl)-acetophenone-o-carboxylic acid were worked out (see formulae). In the present work the general application of this reaction with regard to phtalones of the 2-methylpyridine and 2-methylbenzthiazol is shown. With convenient conditions the authors obtained nitropyrophtalone (formula IV) and nitrobenzthiazophtalone (formula V). The compounds convert to alcohols when boiled and with alcohol influence they convert to the corresponding esters of the α - nitro - α - - substituted acetophenone-o-carbon acids (formula VI). In the case of a solution of nitrophtalones in alcalies with subsequent acidification of alkaline solutions it was possible to seperate in both cases the corresponding nitromethanes with a heterocyclic substituent (formula VIII). The structure of 2-nitromethylbenzthiazol, which was obtained with a good yield and in the form of yel-

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The Nitration of Phtalones. 79-12-22/43

low crystals, was proved by its conversion to benzthiazol - 2 - carboxylic acid by means of sulfuric acid according to the general conversion of primary nitro compounds.
There are 4 references, 3 of which are Slavic.

ASSOCIATION: Chemical Institute AN Latvian SSR (Institut khimii Akademii nauk Latviyskoy SSR).

SUBMITTED: October 24, 1956.

AVAILABLE: Library of Congress.

1. Phtalones - Nitration

Card 2/2

ZALUKAYEV, L.P.

Reaction of n-methyniline with acetaldehyde. Dokl.AN SSSR 110 no.5:791-794 O '56. (MIRA 10:1)

1. Institut khimii Akademii nauk Latviyskoy SSR. Predstavleno akademikom I.N. Nazarovym.

(Aniline) (Acetaldehyde)

5(3) PHASE I BOOK EXPLOITATION SOV/1833

Zalukayev, Leonid Petrovich

Sintez i reaktsii al'fa-nitroketonov (Synthesis and Reactions of Alpha-Nitroketones) Riga, Izd-vo AN Latviyskoy SSR, 1958. 181 p. Errata slip inserted. 1,000 copies printed.

Ed.: Ye. Savel'yeva; Tech. Ed.: A. Zhukovskaya.

PURPOSE: This book is intended for chemists working in the field of the nitration of organic compounds.

COVERAGE: The present monograph covers the nitration of organic compounds which include an active methylene group, and mainly, the nitration of alkyl and aryl derivatives of 1,3-indandione. The solvolytic degradation of such derivatives is also discussed and the resulting formation of a variety of nitrogen compounds many of which are very difficult or impossible to obtain by other methods. The text also mentions other reactions and methods for the preparation

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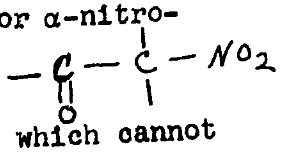
of mono-and diacylated nitromethyl compounds or α-nitroketones with the characteristic arrangement:



$$-\underset{\substack{\| \\ O}}{C}-\underset{|}{\overset{|}{C}}-NO_2$$

Here belong nitroacetone, α-nitroacetophenone which cannot be prepared by direct nitration. The group of α-nitroketones gained popularity due to its exceptional reactivity as a raw material in various syntheses, as aids in the study of the mechanism of chemical reactions, and as a source of reagents for the analysis of organic compounds. One of these compounds, 2-nitro-1, 3-indandione, received full coverage in a separate monograph, therefore this text mentions it briefly for the sake of completeness. One chapter is devoted to the synthesis of 2-alkyl- and arylindandiones which are important in the synthesis of 2-nitro-1, 3-indandione derivatives. There are 129 references 26 of which are Soviet, 30 English, 55 German, 15 French, and 3 Italian.

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Synthesis and Reactions (Cont.) SOV/1833

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Ch. IV. Synthesis of Primary Nitro Compounds by the Deacylation of the Nitromethyl Group 93

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AVAILABLE: Library of Congress

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6-11-59

Card 3/3

AUTHORS: Zalukayev, L. P., Poplavskaya, N. I. SOV/79-29-1-50/74

TITLE: On the So-Called "Di-β-Naphthyl Acetal"(O tak nazyvayemon "di-β-naftilatsetale")

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 1, pp 238 - 241 (USSR)

ABSTRACT: In the case of action of paraldehyde upon β-naphthol in the mixture of acetic- and hydrochloric acid Claisen (Ref 1) obtained a product with a melting point of 200-201° which he called acetaldehyde-β-naphthyl acetal. Wenzke and Nieuwland (Ref 2) on the other hand synthesized di-β-naphthyl acetal from acetylene and β-naphthol. As far as this product was described as di-β-naphthyl acetal and regarded as an intermediate product in several reactions (Refs 1,3) the authors investigated it in detail. Its formation from acetaldehyde was unlikely as at least formaldehyde does not produce a similar acetal under the mentioned conditions. The latter can only be obtained in the case of longer heating of β-naphthol with methyl iodide in sealed tubes in the presence of alkali (Ref 4). He found that in this case croton aldehyde leads to the same product as acetaldehyde. In the course of an exact analysis it was found that the formation

Card 1/3

of the above mentioned product proceeds from the melting point 200-201° of acetaldehyde and β-naphthol according to the equation $2CH_3CHO+2C_{10}H_7OH \rightarrow C_{24}H_{20}O_2+2H_2O$. In the case of heating benzoyl chloride its monobenzoyl derivative is obtained and in the case of boiling with acetic acid anhydride the monobenzoyl derivative is obtained. It contains 1 active hydrogen atom. Saponification of its acetyl derivative leads to the initial product. When distilled it decomposes into β-naphthol and a product with a melting point of 90-92° which corresponds to analysis and molecular weight according to formula $C_{14}H_{14}O$. Thus, the decomposition of "di-β-naphthyl acetal" proceeds according to the scheme $C_{24}H_{20}O_2 \rightarrow C_{14}H_{14}O+C_{10}H_7OH$. The mentioned factors show clearly that "di-β-naphthyl acetal" according to Claisen has a structure that is quite different from the structure hitherto assumed. Further reactions and analytical data permit the condensation product from β-naphthol with paraldehyde to be ascribed the formula 4-[1-(2-oxy-naphthyl)]-2-methyl-5,6-benzochromane (I). The above

On the So-Called "Di-β-Naphthyl Acetal" SOV/79-29-1-50/74

mentioned distillation product with a melting point of 90-92° corresponds to formula (III). There are 9 references, 3 of which are Soviet.

ASSOCIATION: Institut khimii Akademii nauk Latviyskoy SSR (Institute of Chemistry of the Academy of Sciences, Latviyskaya SSR)

SUBMITTED: August 26, 1957

Card 3/3

5(3) SOV/79-29-5-49/75

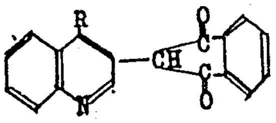
AUTHORS: Zalukayev, L. P., Vanag, E.

TITLE: Nitration of Phthalones. II (Nitrirovaniye ftalonov. II.)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 3, pp 1639-1642 (USSR)

ABSTRACT:

The present paper gives results obtained from experiments made with the purpose of nitrating quinophthalones, that are substituted at the pyridine ring by an alkyl radical and that have the general formula:



As in the case of earlier attempts of producing nitrophthalones (from pyrophthalone, benzthiazophthalone, quinophthalone, Refs 1,2) also in the present case the reaction ran smoothly and under mild conditions. The derivatives of 2-nitro-2-substituted indandione-3 obtained undergo an alcoholysis on temperately heating in alcohol and form esters of α-nitro-α-alkyl quinolyl-2-acetophenone-o-carboxylic acid, wherein the radical of the alkoxy

Card 1/2

Nitration of Phthalones. II SOV/79-29-5-49/75

group corresponds to the radical of the alcohol used. Hydrolysis with sodium lye leads to α-nitromethyl-α-alkyl quinoline. The experimental part describes the reactions carried out and gives physical and analytical data in the compounds. There are 3 references, 2 of which are Soviet.

ASSOCIATION: Institut khimii Akademii nauk Latviyskoy SSR (Chemical Institute of the Academy of Sciences of the Latvian SSR)

SUBMITTED: April 16, 1958

Card 2/2

ZALUKAYEV, L. P.

PHASE I BOOK EXPLOITATION SOV/4350

Soveshchaniye po khimii, tekhnologii i primeneniyu proizvodnykh piridina i khinolina. Riga, 1957

Khimiya, tekhnologiya i primeneniye proizvodnykh piridina i khinolina; materialy soveshchaniya (Chemistry, Technology and Utilization of Pyridine and Quinoline Derivatives; Materials of the Conference) Riga, Izd-vo AN Latviyskoy SSR, 1960. 299 p. Errata slip inserted. 1,000 copies printed.

Sponsoring Agencies: Akademiya nauk Latviyskoy SSR. Institut khimii; Vsesoyuznoye khimicheskoye obshchestvo.

Ed.: S. Bazhanova; Tech. Ed.: A. Klyavinya; Editorial Board: Yu. A. Bankovskiy, Candidate of Chemistry, E. V. Vanaga, Candidate of Chemistry (Resp. Ed.), L. P. Zalukayev, Doctor of Chemistry, and M. M. Kalnyn'.

PURPOSE: This book is intended for organic chemists and chemical engineers.

COVERAGE: The collection contains 33 articles on methods of synthesizing or producing pyridine, quinoline, and their derivatives from natural sources. No personalities are mentioned. Figures, tables, and references accompany the articles.

II. SYNTHETIC MEANS OF PREPARING PYRIDINES AND QUINOLINES

Saigrov, A. S., and O. S. Otroshchenko. [Sredneaziatskiy gosudarstvennyy universitet imeni V. I. Lenina (Central Asia State University imeni V. I. Lenin)]. Synthetic Studies

Card 4/10

Farberov, M. I., B. P. Ustavshchikov, A. M. Kut'in, P. Vernova, and Ye. V. Yarosh. [Yaroslavskiy tekhnologicheskiy institut; Opytnyy zavod Ministerstva khimicheskoy promyshlennosti (Yaroslavl' Technological Institute; Experimental Plant of the Ministry of the Chemistry Industry)]. Technical Syntheses of 2-Methyl-5-ethylpyridine and 2-Methyl-5-vinylpyridine and Their Fields of Application 97

Vanag, G. Ya. [Institut organicheskogo sinteza Akademii nauk Latviyskoy SSR (Institute for Organic Synthesis of the Academy of Sciences Latviyskaya SSR)]. The Transition From 1,3- Indandione to Pyridine Derivatives 111

Koton, M. M. [Institut vysokomolekulyarnykh soyedineniy Akademii nauk SSSR (Institute for High Molecular Compounds of the Academy of Sciences USSR)]. Synthesis and Polymerization of Unsaturated Compounds of the Pyridine and Quinoline Series 119

Ardashev, B. I. [Rostovskiy gosudarstvennyy universitet (Rostov State University)]. Industrial Synthesis of Lepidine Bases 127

Kozlov, N. S. [Permskiy sel'skokhozyaystvennyy institut (Perm' Agricultural Institute)]. Catalytic Synthesis of Quinolinic Bases From Aromatic Amines and Acetylene 131

Minkin, V. I. [Rostov State University] Preparation of Quinaldines From Sodium Acyl Anilides and Synthesis of N-Arylquinaldine Salts 139

Mikhaylov, G. I. [Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov (All-Union Scientific Research Institute for Chemical Reagents)]. Study of the Hydroxyquinoline Method of Synthesizing Quinolinic Bases 145

Tertov, B. A. [Rostov State University] Synthesis of Derivatives of Quinoline and Some N-Aryllepidine Salts of Aryl Amines 151

Kozlov, N. S., and O. K. Koz'minykh [Permskiy gosudarstvennyy pedagogicheskiy institut (Perm' State Pedagogical Institute)]. Catalytic Syntheses of 2-Phenyl- 5,6-benzoquinoline Derivatives 159

Ardashev, V. I. [Rostov State University]. Catalytic Conversion of Acylated Aryl Amines to Quinolines 171

Zalukayev, L. P. Products of the Condensation of Aniline and Its N-Alkyl Derivatives With Acetaldehyde in a Neutral Medium 175

ZALUKAYEV, L.P.

PHASE I BOOK EXPLOITATION SOV/4350

Soveshchaniye po khimii, tekhnologii i primeneniyu proizvodnykh piridina i khinolina. Riga, 1957

Khimiya, tekhnologiya i primeneniye proizvodnykh piridina i khinolina; materialy soveshchaniya (Chemistry, Technology and Utilization of Pyridine and Quinoline Derivatives; Materials of the Conference) Riga, Izd-vo AN Latviyskoy SSR, 1960. 299 p. Errata slip inserted. 1,000 copies printed.

Sponsoring Agencies: Akademiya nauk Latviyskoy SSR. Institut khimii; Vsesoyuznoye khimicheskoye obshchestvo.

Ed.: S. Bazhanova; Tech. Ed.: A. Klyavinya; Editorial Board: Yu. A. Bankovskiy, Candidate of Chemistry, E. V. Vanaga, Candidate of Chemistry (Resp. Ed.), L. P. Zalukayev, Doctor of Chemistry, and M. M. Kalnyn'.

PURPOSE: This book is intended for organic chemists and chemical engineers.

COVERAGE: The collection contains 33 articles on methods of synthesizing or producing pyridine, quinoline, and their derivatives from natural sources. No personalities are mentioned. Figures, tables, and references accompany the articles.

III. SYNTHESES BASED ON PYRIDINE AND QUINOLINE

Shimanskaya, M. V., and S. A. Giller (Institute for Organic Synthesis of the Academy of Sciences Latviyskaya SSR). Vapor Phase Contact Oxidation of Picolines 155

Vompe, A. F., N. V. Monich, N. F. Turitsyna, and L. V. Ivanova [Vsesoyuznyy nauchno-issledovatel'skiy kinofoto-institut (All-Union Motion Picture Scientific Research Institute)]. Mobility of the Alkoxy (Phenoxy) Group in Quaternary Salts and in Salts of γ-Alkoxy (Phenoxy) Pyridines.

Stepanov, F. N., and N. A. Aldanova [Kafedra organicheskoy khimii Moskovskogo instituta rybnoy promyshlennosti; Vsesoyuznyy nauchno-issledovatel'skiy institut poluproduktov i krasiteley MKhP SSSR (Department of Organic Chemistry of the Moscow Institute for the Fishing Industry; All-Union Scientific Research Institute for Semifinished Materials and Dyes, Ministry of the Chemical Industry USSR)]. Condensation of Alkyl Pyridines With Aryl Halides 203

Vasserman, Kh. M., and S. A. Giller [Rizhskiy meditsinskiy institut; Institut organicheskogo sinteza Akademii nauk Latviyskoy SSR (Riga Medical Institute; Institute of Organic Synthesis,)]. The Use of Saturated Nitrogen-Containing Heterocyclic Compounds for Synthesis of Ganglia-Blocking and Curariform Substances 207

Zalukayev, L. P., and E. V. Vanag [Institut khimii Akademii nauk Latviyskoy SSR (Chemical Institute of the Academy of Sciences Latviyskaya SSR)]. Synthesis and Reactions of α-Nitromethylquinolines 223

Card 8/10

5.3610

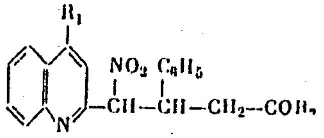
77369
SOV/79-30-1-30/78

AUTHORS: Zalukayev, L. P., Vanag, E. V.

TITLE: Some Reactions of 2-Nitromethylquinoline. III. Reaction With α, β-Unsaturated Ketones

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 1, pp 145-147 (USSR)

ABSTRACT: 2-Nitromethylquinoline was heated with chalcone, and 2-nitromethyl-4-methylquinoline with chalcone and benzalacetone and derivatives with general formula (III) were obtained.



(III)

$R_1 = H, CH_3; R_1 = CH_3, C_6H_5.$

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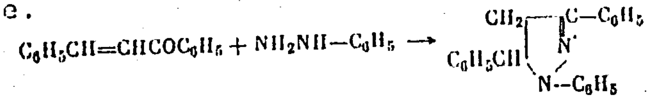
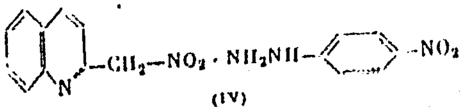
Some Reactions of 2-Nitromethylquinoline. 77369
III. Reaction With α,β-Unsaturated Ketones SOV/79-30-1-30/78

The reaction is reversible. γ-Nitrobutyrophenones with bases (phenylhydrazine, p-nitrophenylhydrazine, aniline) can eliminate elements of 2-nitromethylquinoline; as a result, a quinoline derivative and chalcone react with amines independently from each other. Specifically, phenylhydrazine with (III) forms 1,3,5-triphenylpyrazolidine.



2-Nitromethylquinoline with p-nitrophenylhydrazine forms the addition product (IV).



(IV)

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Some Reactions of 2-Nitromethylquinoline. 77369
III. Reaction With α, β-Unsaturated Ketones SOV/79-30-1-30/78

γ-Nitro-γ-(4-methylquinolyl-2)-β-phenylbutyrophenone reacts similarly. γ-Nitro-γ-(quinolyl-2)-β-phenylbutyrophenone was obtained in 90% yield, mp 163°; γ-nitro-γ-(4-methylquinolyl-2)-β-phenylbutyrophenone, in 71% yield, mp 151-152°; γ-nitro-γ-(4-methylquinolyl-2)-β-phenylpentanone (yield 2.9 g, yellow crystals, mp 150-151°; 4.4 g of 2-nitromethyl-4-methylquinoline was taken as starting material); γ-nitro-γ-(p-nitrophenyl)-β-phenylbutyrophenone (0.85 g colorless needles, mp 178°; 0.9 g of p-nitrophenylnitromethane was taken as starting material). There are 5 references, 2 Soviet, 2 U.S., 1 German. The U.S. references are: E. Kohler, J. Am. Chem. Soc., 41, 1738 (1924); C. Allen, M. Bridgess, ibid., 51, 2153 (1929).

ASSOCIATION: Voronezh Agricultural Institute and Institute of Chemistry, Academy of Sciences of Latvian SSR (Voronezhskiy sel'skokhozyaystvennyy institut i institut khimii Akademii nauk Latviyskoy SSR)

Card 3/3

SUBMITTED: January 5, 1959

ZALUKAYEV, L.P.; SPITSINA, L.Ya.

Bimolecular alkylidenearylamines. Part 7: Structure of "Eibner bases." Zhur.ob.khim. 31 no.9:3067-3069 S '61. (MIRA 14:9)

1. Voronezhskiy gosudarstvennyy universitet i Voronezhskiy sel'skokhozyaystvennyy institut.

(Quinoline)

ZALUKAYEV, L.P.; OZERYANAYA, I.N.; TOMILOVA, M.Ye.

Synthesis of 2, 4-dimethylbenzoquinolines. Izv.vys.ucheb.zav.; khim.i khim.tekh. 5 no.1:174-175 '62. (MIRA 15:4)

1. Voronezhskiy gosudarstvennyy universitet i Rizhskoye vyssheye inzhenerno-aviatsionnoye uchilishche.
(Benzoquinoline)

ZALUKAYEV, L.P.; ZHELTUKHINA, T.I.

Reduction of dihydroquinoline by formic acid. Izv. vys. ucheb. zav.; khim. i khim. tekh. 6 no.3:521-522 '63. (MIRA 16:8)

1. Voronezhskiy gosudarstvennyy universitet i Voronezhskiy sel'skokhozyaystvennyy institut.
(Quinoline) (Formic acid)

ZALUKAYEV, L.P.; ZHELTUKHINA, T.I.

Synthesis of N-benzoyl derivatives of 1,2-dihydroquinolines. Dokl. AN SSSR 153 no.3:592-593 N '63. (MIRA 17:1)

1. Voronezhskiy gosudarstvennyy universitet i Voronezhskiy sel'skokhozyaystvennyy institut. Predstavleno akademikom M.I. Kabachnikom.

ZALUKAYEV, L.P.; SPITSINA, L.Ya.

Bimolecular alkylidenearylamines. Part 8: Synthesis of -2-methyl-4-N-acetanilido-1,2,3,4-tetrahydroquinoline and its bromination. Zhur.ob.khim. 33 no.6:1956-1958 Je '63. (MIRA 16:7)

1. Voronezhskiy gosudarstvennyy universitet i Voronezhskiy sel'skokhozyaystvennyy institut.

(Quinoline) (Bromination)

ZALUKAYEV, L.P.; YEVSEYEVA, I.I.

Oxidative hydrolytic leavage of 2-aryl-1,3-indandiones. Zhur.ob. khim. 33 no.12:4025-4026 D '63. (MIRA 17:3)

1. Voronezhskiy gosudarstvennyy universitet.

ACCESSION NR: AP4026365 S/0138/64/000/003/0019/0021

AUTHORS: Zalukayev, L. P.; Pivnev, V. I.; Reznikov, V. S.; Shestakova, O. G.; Korbanova, Z. N.; Buryagina, A. S.

TITLE: A study of thermal aging in protector rubbers made from natural rubber by nuclear magnetic resonance

SOURCE: Kauchuk i rezina, no. 3, 1964, 19-21

TOPIC TAGS: thermal aging, rubber, nuclear magnetic resonance, magnetic field, aging coefficient, oxidation kinetics

ABSTRACT: The nuclear magnetic resonance (NMR) method is briefly described. The phenomenon involves magnetic moments acquired by the nuclei of element atoms placed in a constant magnetic field of magnitude H_o. For a proton-nucleus atom of hydrogen, the orientation energy is determined from

$$\Delta E = 2\mu H_0$$

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ACCESSION NR: AP4026365

and the frequency from

$$h\nu_0 = 2\mu H_0 .$$

This method has been used to determine the thermal aging of 2-mm thick protector rubber specimens with various antioxidants at 100, 120, and 140C temperatures in atmospheric air. The amplitude change ΔA of an arbitrary NMR signal is represented graphically as a function of time and temperature. At 120 and 140C temperatures a plateau is observed in the curves for aging times of 90 and 30 hours respectively. A table is presented of aging coefficients, comparing the oxidation kinetics of eleven specimens by the NMR method and a mechanical method. The NMR method is shown to be a useful means for investigating thermal aging in rubber. Orig. art. has: 3 formulas, 2 tables, and 1 figure.

ASSOCIATION: Voronezhskiy shinny*y zavod (Voronezh Tire Works); Voronezhskiy Gosudarstvenny*y universitet (Voronezh State University)

SUBMITTED: 00 DATE ACQ: 17Apr64 ENCL: 00

SUB CODE: MT NO REF SOV: 002 OTHER: 000

Card 2/2

BR

ACCESSION NR: AP4030373 S/0190/64/006/003/0538/0540

AUTHORS: Zalukayev, L. P.; Pivnev, V. I.

TITLE: The application of nuclear magnetic resonance to the study of aging of rubber

SOURCE: Vy*sokomolekulyarny*ye soyedineniya, v. 6, no. 3, 1964, 538-540.

TOPIC TAGS: rubber, rubber aging, rubber oxidation, structuration, oxidation inhibitor, neozone D, ionol, dinaphthylphenylenediamine, nuclear magnetic resonance, induction period, autocatalytic process

ABSTRACT: Films of butadiene rubber SKB(0.3 mm thick), containing 0.25 or 0.5% of various antioxidants, were subjected to oxidation at 130C in air for various periods up to 600 hours. The amplitude of the signal derivative of proton nuclear magnetic resonance (NMR) of these samples was recorded, and the results were compared with data from the volumetric studies. As is shown on the chart (Fig. 1 of the Enclosure), the oxidation induction period for rubber containing 0.5% neozone D is approximately twice that of the sample containing 0.25% of this antioxidant. A steep climb of the curve following the induction period is typical for

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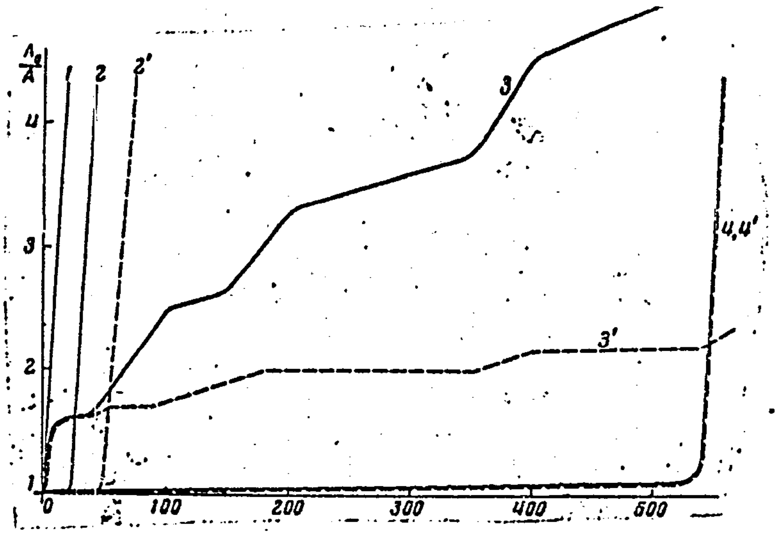
neozone D. When measured by the NMR technique, the oxidation induction period of sample containing 0.25% neozone D was 22 hours, as against 100 hours needed in the volumetric method. This is explained by the fact that after 22 hours the oxidation process acquires an autocatalytic aspect. The use of N,N'-dinaphthyl-p-phenylenediamine (DNPD) as antioxidant produced an NMR curve of similar character, but here the induction period was extended to 550 hours and was not affected by the amount of antioxidant. The antioxidant ionol produced NMR curves of a staggered character, in which segments pertaining to autocatalytic oxidation are followed by periods of stabilization. The authors have advanced a theory that here the inhibition is due to the formation of oxidation products of ionol (such as diphenols and diquinones). Orig. art. has: 1 chart and 4 formulas.

ASSOCIATION: Voronezhskiy gosudarstvenny*y universitet (Voronezh State University)

SUBMITTED: 01Apr63 DATE ACQ: 07May64 ENCL: 02

SUB CODE: MT NO REF SOV: 004 OTHER: 000

ACCESSION NR: AP4030373 ENCLOSURE: 01



Oxidation time, hours

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ACCESSION NR: AP4030373. ENCLOSURE: 02

Fig. 1. Progress of structuration at 130C of sodium-butadiene rubber.

1 - rubber
2 - rubber with 0.25% neozone D
3 - rubber with 0.25% ionol
4 - rubber with 0.25% DNPD
2'- rubber with 0.5% neozone D
3'- rubber with 0.5% ionol
4'- rubber with 0.5% DNPD

ZALUKAYEV, L.P.; VNENKOVSKAYA, D.G.

Synthesis of derivatives of benzyl-o-carboxylic acid. Zhur. ob. khim. 34 no. 3:838-840 Mr '64. (MIRA 17:6)

1. Voronezhskiy gosudarstvennyy universitet.

ZALUKAYEV, L.P.; KRIVOSHEIN, V.V.; KHARINA, G.A.

Interaction of 2-aryl-1,3-indandiones with p-benzoquinone.
Zhur. ob. khim. 34 no.7:2478-2479 Jl '64 (MIRA 17:8)

1. Voronezhskiy gosudarstvennyy universitet.

ZAIUKAYEV, L.P.; SPITSYNA, L.Ya.

Bimolecular alkylidene aryl amines. Part 9: Special structure of 2-methyl-4-anilino-1,2,3,4-tetrahydroquinolines. Zhur. ob. khim. 34 no.10:3392-3395 O '64. (MIRA 17:11)

1. Voronezhskiy gosudarstvennyy universitet i Voronezhskiy sel'skokhozyaystvennyy institut.

ACCESSION NR: AP4041751 S/0076/64/038/006/1434/1441

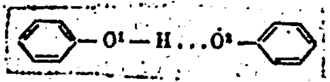
AUTHOR: Meleshina, A. M.; Zalukayev, L. P.

TITLE: Charge transfer complex formation by free radicals

SOURCE: Zhurnal fizicheskoy khimii, v. 38, no. 6, 1964, 1434-1441

TOPIC TAGS: free radical, charge transfer complex, phenol, phenoxyl, quantum mechanics

ABSTRACT: An attempt has been made to determine the possibility of the existence of a charge transfer complex in the phenol-phenoxyl system by quantum mechanical calculations. Phenol was selected because of the absence of steric hindrance. The normal-state energy was calculated for a certain hypothetical distance between the phenol and the radical, and for a certain normal arrangement of the two species. The following assumptions were made: 1) the benzene ring energy does not change in all cases; 2) the energy of the complex is essentially determined by the interaction between the hydrogen and the two oxygens:



;

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ACCESSION NR: AP4041751

3) complex formation affects mainly the bond $O^1-H...O^2$; the change in the interaction between CO^1 and CO^2 will be disregarded; and 4) the possible sandwich structure of the complex will be disregarded. Since the calculated normal-state energy of the complex was lower than the calculated energy of $C_6H_5OH + C_6H_5O\cdot$ (i.e., in the absence of complex formation), it was concluded that formation of a molecule-radical charge transfer complex is possible. This work was done at Voronezh State University. Orig. art. has: 4 tables and 60 formulas.

ASSOCIATION: Voronezhskiy gosudarstvenny*y universitet (Voronezh State University)

SUBMITTED: 08Feb63 ATD PRESS: 3055 ENCL: 00

SUB CODE: GP, GC NO REF SOV: 004 OTHER: 005

Card 2/2

ZALUKAYEV, L.P.; MIKHANT'YEV, B.I.; ZALUKAYEVA, Ye.A.

Problem of intramolecular donor-acceptor interaction. Dokl. AN SSSR 156 no. 5:1109-1111 Je '64. (MIRA 17:6)

1. Voronezhskiy gosudarstvennyy universitet. Predstavleno akademikom M.I.Kabachnikom.

ZALUKAYEV, L.P., ANOKHINA, I.K.

Addition of acylacetic esters to 2-arylidene-1,3-indandiones.
Zhur. ob. khim. 34 no. 3:840-843 Mr '64. (MIRA 17:6)

1. Voronezhskiy gosudarstvennyy universitet.

ZALUKAYEV, L.P.; KLYKOVA, L.V.

Synthesis of 1,3-indandione derivatives. Zhur. ob. khim. 35 no.1: 184-185 Ja '65. (MIRA 18:2)

1. Voronezhskiy gosudarstvennyy universitet.

ACC NR: AP6034209 (A,N) SOURCE CODE: UR/0153/66/009/004/0681/0682

AUTHOR: Zalukayev, L. P.; Zheltukhina, T. I.

ORG: Department of Organic Chemistry, Voronezh Agricultural Institute (Kafedra organicheskoy khimii, Voronezhskiy sel'skokhozyaystvennyy institut)

TITLE: Reactions of halogens with N-benzoyl derivatives of 1,2-hydroquinolines

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 9, no. 4, 1966, 681-682

TOPIC TAGS: hydroquinoline, ~~acylated hydroquinoline~~, halogenation, ~~of acylated hydroquinoline~~ halogenated organic compound

ABSTRACT: Halogenation of acylated derivatives of 1,2-hydroquinolines Ia and Ib in carbon tetrachloride solution yielded the dihalogen derivatives IIa (mp 153—154°C, yield 56%); IIb (mp 127—128°C, yield 60%); IIc (mp 146—147°C, yield 82%); and IId (mp 134—135°C, yield 85%):

Card 1/3 UDC: 547.831.4